TCAD EIC Message: February 2019

AS WE close out the year 2018, it is time to reflect back a number of milestones achieved throughout the year. The transition to the new EIC and team included a 50-member editorial board with 19 new members selected after an extensive round of open call for editorial board nominations. While, this was a reduction in the editorial board from 66 members previously, the response time remained steady at about two months from submission to first decision. As of this writing in December, we received 469 new manuscripts as well as 371 revised manuscripts in 2018. The top two departments with substantial lead over the rest were "Modeling and Simulation" and "Emerging Technologies and Applications."

The geographic distribution of authors of accepted papers continues to shift from Region 1–6 (USA) to Region 10 (Asia/Pacific). Table I shows these trends with nearly half the published authors from Asia/Pacific region, mainly China and India.

Table II shows submission trends over the years that remain steady at 800–900 manuscripts reviewed every year. Of the 710 decisions made over 2018, the average time to first decision was 62 days with all departments below 60 days, except for a special issue (on Physical Design) which ironically took nearly twice the average. Average reviewer turn around is one month, a week shorter in case of revisions. Average time to final decision was 95 days.

Looking across the years, the average time to decision is pretty consistent at about two months. Since a vast majority of the papers go through one round of revision, on an average, a manuscript is accepted in about four months. The publication in print, however, is quite variable driven by page budgets, logistics of page charges, etc. We publish about 16 regular papers per issue with a backlog that currently stands at over 150 papers. This backlog adds to the paper appearance, nearly 16 months since the paper was submitted. However, majority of our readership is online, via Xplore. Indeed, the print subscribers for IEEE TCAD and for most publications have been declining for years, it currently stands below 200 subscribers. That begs the question if we are due for restructuring our publications to perhaps an online-only publication. While that debate will not be settled in these pages, a discussion of alternatives can be found in a talk at a CEDA event I gave earlier this year (https://goo.gl/xh1aLh).

In the meantime, we do have a number of near term challenges and opportunities to ensure continued success of IEEE TCAD to ensure its continue rise in its impact and timeliness of the topical areas. First, there is now an increased emphasis on verifiability and repeatability of published results. We strongly encourage authors to make use of supplemental materials that can be submitted including use of Code Ocean to provide meaningful contributions to the technologies represented in IEEE TCAD scope areas.

TABLE I
GEOGRAPHIC DISTRIBUTION OF AUTHORS OF PUBLISHED PAPERS (PERCENTAGES)

	2018	2017	2016	2015	2014
Regions 1 – 6 (U.S.A.)	30.7	33.3	34.70	39.4	35.2
Region 7 (Canada)	1.66	1.12	3.80	1.6	2.9
Region 8 (Europe/Africa, Middle East)	16.2	21.7	23.6	26.5	20.2
Region 9 (Central/South America)	1.66	1.9	1.00	0.7	0.9
Region 10 (Asia/Pacific)	48.5	41.8	36.9	31.8	40.8

TABLE II
IEEE TCAD SUBMISSIONS THROUGH THE YEARS

Year	2018*	2017	2016	2015	2014
Submitted	469	515	527	461	510
Submitted (revised)	371	384	291	355	311
Accepted	208	216	179	233	164

This is also a reminder to our editorial board members to step up to a role that is more than serving as a referee among competing reviewer opinions. Indeed, they must exercise judgement and explain to our authors the basis behind the decisions being made. At the same time, we are guided strictly by the well-reasoned policies set by the IEEE Publications Board that include minimum of two independent reviews for any decision (including preliminary administrative recommendations) that depends upon the evaluation of the content submitted. More significantly, editors are strictly forbidden from influencing or editing any reviewer feedback. These are common practices of good editorial operations and we will continue to observe them.

It is my pleasure to announce the following additions to the editorial board selected from the open solicitation we ran in the Fall of 2018.

Philip Brisk
University of California at Riverside
Riverside, CA, USA
Microfluidics, FPGA

Suman Chakraborty
Indian Institute of Technology Kharagpur
Kharagpur, India
Microfluidics

Digital Object Identifier 10.1109/TCAD.2018.2890315

Claudionor Coelho
Google
Mountain View, CA, USA
Accelerated Machine Learning

Abdoulaye Gamatie
LIRMM
Montpellier, France
Embedded Systems

Swaroop Ghosh
Penn State University
State College, PA, USA
Embedded Security

Xun Jiao
Villanova University
Villanova, PA, USA
Approximate Computing

Finally, I would like to express our great appreciation to my editorial board, especially Dr. X. Li, the Deputy EIC, for his dedicated efforts and strong support. I am very thankful to S. Dailey, the corresponding editor, who has provided outstanding services to handle all administrative tasks on a timely manner. I wish to thank all authors, reviewers, readers, editors, IEEE staff members, and IEEE CEDA leaders for their continuous support over many years.